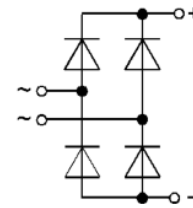


## Single Phase Bridge Rectifier, 100 Amps

### Features

- Easy connections
- Excellent power volume ratio
- Insulated type



MDQ

Voltage Ratings ( $T_J = 25^\circ\text{C}$ unless otherwise noted)				
Type number	Voltage code	$V_{RRM}$ , Max. repetitive peak reverse voltage (V)	$V_{RSM}$ , Max. non-repetitive peak reverse voltage (V)	$I_{RRM}$ max @ $T_J$ max (mA)
MDQ100	80	800	900	10
	100	1000	1100	
	120	1200	1300	
	140	1400	1500	
	160	1600	1700	

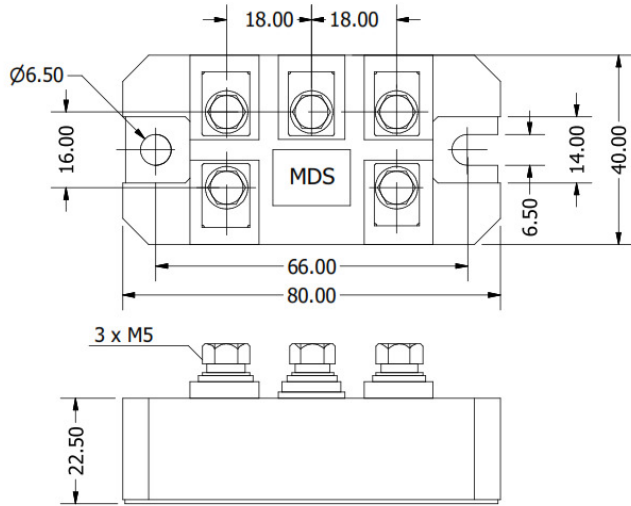


Electrical Specifications ( $T_J = 25^\circ\text{C}$ unless otherwise noted)				
Parameters	Conditions	Symbol	Values	Units
Maximum DC output current	$T_C = 85^\circ\text{C}$	$I_{DC}$	100	A
Forward surge current (non-repetitive), one cycle	$f = 50$ Hz	$I_{FSM}$	1150	A
Fusing current		$I^2t$	6600	$\text{A}^2\text{s}$
Maximum forward voltage drop	$I_{FM} = 100\text{A}$ , $T_J = 25^\circ\text{C}$	$V_{FM}$	1.3	V
RMS isolation voltage		$V_{ISO}$	3000	V

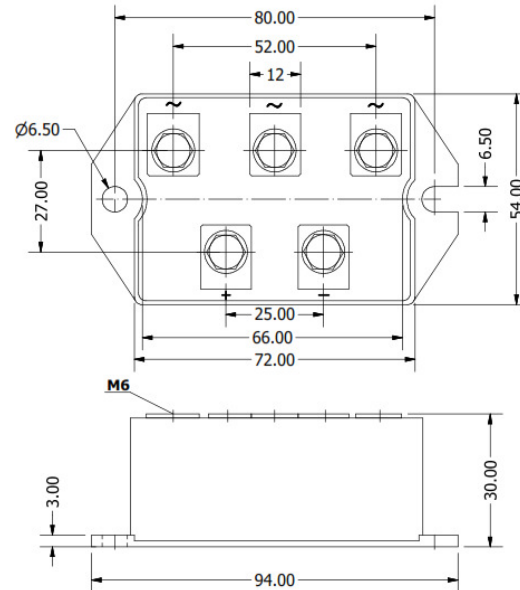
Thermal and Mechanical Specifications ( $T_J = 25^\circ\text{C}$ unless otherwise noted)			
Parameters	Symbol	Values	Units
Maximum operating junction temperature range	$T_J$	- 40 to + 150	$^\circ\text{C}$
Maximum storage temperature range	$T_{STG}$	- 40 to + 150	$^\circ\text{C}$
Maximum thermal resistance, junction to case	$R_{th(J-C)}$	0.16	$^\circ\text{C}/\text{W}$
Mounting torque	to heatsink	$4 \pm 15\%$	Nm
	to terminal	$4 \pm 15\%$	
Approximate weight	W	180	g

## Package Outline

(All dimensions in mm)



Package Type	D
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Package Type	S
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## Ordering Table

MDQ	100	/	120
1	2		3

1 – Single-Phase Bridge

2 – Current =  $I_D$

3 – Voltage Code x 10 =  $V_{RRM}$  (See Voltage Ratings Table)